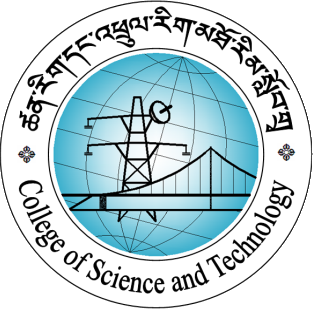
****

**Proposal**

**For**

**Final Year Project**

**Department of Information Technology**

**Student Information System**

**Submitted by**

Rinzin Dema(EIT2012026)

Ney Dorji(02042013008)

Sonam Tenzin(02042013019)

**Royal University of Bhutan, College of Science and Technology**

**Read carefully before filling the form.**

1. Please do not alter the layout of the application form. Information must be filled in the spaces provided, under set format.
2. Guidance notes in various fields should not be deleted.
3. Required information should be duly filled in the specified fields.
4. Required heads/fields which are not relevant to the project should be marked **N/A** (Not Applicable) or left blank and should not be deleted.

**Guidelines and Forms**

**Introduction**

Considering the geographical terrain, the Royal Government of Bhutan has recognized and endorsed ICT as an enabler of developmental activities. Therefore, installation of ICT infrastructure in the 20 districts with Local Area Network has been initialized and completed at the end of the 9th five year plan implementation phase. The potential of ICT attracted the attention of the development planners in Bhutan and the 10th FYP was designed to fully harness the potential of ICTs to achieve the developmental goal especially of poverty reduction of the Millennium Declaration and Gross National Happiness.

In order to address the IT HR need in the country and to promote and support IT industries in the country, the Information Technology Department (ITD) proposed to introduce a four year Bachelor of Engineering in Information Technology degree in 2009. The College launched BE (IT) with 30 students from the winter semester of 2010. Presently, ITD is supported by 13 teaching faculty and three technicians.

To provide wholesome IT knowledge and skills to the students, ITD introduced modular courses from 2011 in collaboration with NIIT under Chiphen Rigphel Project.

**Submission Procedure**

Duly filled proposal forms completed in all respects should be submitted in form of soft copy and a hard copy to project guide and project coordinator. On receipt of the applications the proposals will be evaluated by reviewer panel and proposal would then be defended by student groups. The project group may need to revise the proposal in light of the evaluator’s recommendations.

**For further information, please contact:**

Kezang Dema

Project Coordinator

kezangdema.cst@rub.edu.bt

CST

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**Application for Final Year Project**

# 1. Project Identification

| 1. **Reference Number:** | | | |
| --- | --- | --- | --- |
| (for office use only) | | | |
| 1. **Project Title:** | | | |
| **Student Information System - SIS** | | | |
| 1. **Project Internal Guide:** | | | |
| Name: | **Mr. Tshering** | | |
| Designation: | Senior Lecturer | | |
| Organization: | College of Science and Technology | | |
| Mobile # : | 17807651 | Tel. # : |  |
| Email: | [Tshering.cst@rub.edu.bt](mailto:Tshering.cst@rub.edu.bt) | | |
| **C1. Project External Guide:** | | | |
| Name: | **NA** | | |
| Designation: |  | | |
| Organization: |  | | |
| Mobile # : |  | Tel. # : |  |
| Email: |  | | |
| **C2. Student Group Lead:** | | | |
| Name: | **Sonam Tenzin** | | |
| Roll No: | 02042013019 | | |
| Department: | Information Technology | | |
| Mobile # : | 17508487 | Tel. # : |  |
| Email: | [02042013019.cst@rub.edu.bt](mailto:02042013019.cst@rub.edu.bt) | | |

| 1. **Organizations Involved in the Project:**   *(Please identify all affiliated organizations collaborating in the project, and describe their role/contribution to the project.)* | | | |
| --- | --- | --- | --- |
| **D1. Industrial Organizations:** | | | |
| *#* | *Organization Name* | | *Role / Contribution* |
|  | *NA* | |  |
| **D2. Academic Organizations:** | | | |
| *#* | *Organization Name* | *Role / Contribution* | |
|  | *College of Science and Technology* |  | |
| **D3. Funding Organizations:** | | | |
| *#* | *Organization Name* | | *Role / Contribution* |
|  | *NA* | |  |
| 1. **Key Words:**   *(Please provide a maximum of 5 key words that describe the project. The key words will be incorporated in our database.)* | | | |
| SIS, Student Information System, Result, Student Details | | | |
| 1. **Research and Development Theme:**   **Develop a functional information management system for College of Science and Technology** | | | |
|  | | | |
| 1. **Project Status:**   (Please mark 🗹)   New 🗹 Modification to previous Project  🗹 Extension of existing project | | | |

| 1. **Project Duration:** | | |
| --- | --- | --- |
| Expected Starting Date: | 10th August 2016 | |
| Planned Duration in months: | 10 months | |
|  |  |

# 2. Scope, Introduction and Background of the Project

| 1. **Scope of the Project:** |
| --- |
| SIS (Student Information System) in its third version aims to provide a comprehensive and reliable online system for management of student information.  This particular version will focus on bug fixing of the previous version, bulk upload feature, server security and examination and result feature. The bulk upload feature will remove the need for self-registration of students by enabling the Admin to upload the basic students’ details so that students can add later on. Unlike students Staff will have to be added individually by the Admin. Result will now be a part of student details. All the past results will also be included in students’ details. Exam Cell will be able to upload the result of individual students to their individual page so that each student can view only their results.  The project will be done over a span of 10 months and will be functional by May 15, 2017. |

| 1. **Introduction (Project Background and Literature Review, Current State of the Art):**   *(Detailed summary of what all has been done internationally in the proposed area quoting references and bibliography. Please note that this section demonstrates the depth of knowledge of the project team and builds the confidence of the evaluators about capability of the team in achieving the stated objectives.)*  *(Please describe the current state of the art specific to this research topic.)*  Every organization, be it business or institutional, runs on information and has their own way of gathering, recording, storing and managing information. Trivially, all that is needed is a pen and a paper. However it becomes cumbersome and a time consuming task when a large amount of information is involved.  Such has been the case for College of Science and Technology with student’s information. Relying only on pen and paper is not only a long inefficient process but also a waste of resources. A typical registration period at CST extends up to a week and involves human resources and materials, wasting both time and resources.  Similarly students and parents have to rely solely on the exam cell for their results. Parents who want to check their children’s progress need to either come to the College physically or have to personally talk with Lecturers or Deans.  Organizations all over the world have already adopted the use of Information Systems and moreover, CST being a technical institute, it is high time to make use of the technology to be more efficient and reliable.  Having realized the need for such a system, the previous two final year project groups have taken up the task to build the Student Information System for CST. However such a massive system proved to be a huge challenge for the students due to limited expertise, time and resources. The first group used Laravel framework 4.2 and named the project **Student Management System (SMS)**. They developed student registration, viewing student and staff details. However, they could only develop the interface and the database and couldn’t work on the server. Hence their system version one could not be hosted.  The second group continued the project using the same framework and renamed it as **Student Information System (SIS)**. The group worked on refining the version one and added the parent portal. Their system was hosted globally during evaluation but due to flaws in server security, the system got compromised within a week and had to be taken down. Group strengthened the system and hosted locally over the college network. College has implemented SIS since the winter semester 2016. Due to bugs in the self registration system using email confirmation and validation system, it couldn't be implemented as intended. For instance, currently students upon registration request, do not receive validation email and with different email any number of requests can be sent.  Ultimately the administrator have to spend a lot of time verifying those registration. The parent portal also need to be reworked for mapping student to parent individually. In the current system once signed as parent, one can easily view the details of any student which violates student’s privacy.  The version three SIS will be modified and extended to address all the issues of the previous versions such as auto validation at registration request, bulk upload of student validation data from a spreadsheet. Result records will also be introduced to help module tutors disclose results effectively and easily. This feature would enable the tutors to directly upload individual student’s marks to the SIS in addition to the exam cell. The new SIS will be thoroughly tested, validated and made operational by 15 May 2017.  **Literature Review:**  “Web Application develop with laravel php framework version 4” by Jamal Armel. The main purpose of the work was to learn a new PHP framework and use it efficiently to build an eCommerce web application for a small start-up freelancing company that will let potential customers check products by category and pass orders securely. To fulfil this set of requirements, a system consisting of a web application with a backend was designed and implemented using built in Laravel features such as Composer, Eloquent, Blade and Artisan and a WAMP stack. The web application was built using the Laravel framework version 4, a modern PHP frame-work that aims at making PHP development easier, faster and more intuitive. The web application was built following the MVC architecture pattern. Admin panels were created for easily updating and managing the categories and products and uploading product images as well. A public interface was made available also to let registered users to log in and add orders to their carts and proceed to check out using PayPal. The application is easily expandable and features can be added or removed effortlessly thanks to the Laravel’s ability to manage packages through Composer’s Packagist online repository. The results proved that Laravel 4 is effectively a premium choice for a PHP framework that helps developers rapidly build secure, upgradable web applications. (Armel, 2014)  “Attendance Management System” was a project report by Saura Kumar, Umal Jain and Bhapesh Kumar Sharma. Attendance Management System is a software developed for daily student attendance in schools, colleges and institutes. It facilitates to access the attendance information of a particular student in a particular class. The information is sorted by the operators, which will be provided by the teacher for a particular class. This system will also help in evaluating attendance eligibility criteria of a student. (Saurab Kumar Jain; Umal Joshi; Bhapesh Kumar Sharma, 2010)  “Student Database Management System” by Ajay Shankar and Abhishek Kumar. They overhauled the existing Student Database Management System and made necessary improvement to streamline the processes. Administrators using the system can record and retrieve student’s information and manage their classes, including marking of attendance. (Ajay Shankhar Bidyarthy;Abhishek Kumar, 2012)  “A Research Paper on College Management System” by Lalit Mohan Joshi. This paper was aimed at developing an Online Intranet College Management System (CMS) that is of importance to either an educational institution or a college. The system (CMS) is an Intranet based application that can be accessed throughout the institution or a specified department. This system may be used for monitoring attendance for the college. Students as well as staffs logging in may also access or can search any of the information regarding college. Attendance of the staff and students as well as marks of the students will be updated by staff. This system is being developed for an engineering college to maintain and facilitate easy access to information. For this the users must be registered with the system after which they can access as well as modify data as per the permissions  given to them. CMS is an intranet based application that aims at providing information to all the levels of management with in an organization. This system can be used as a knowledge/information management system for the college. For a given student/staff (technical/Non-technical) can access the system to either upload or download some information from the database. (Joshi, 2015)  “Student Management System” by Dechen Wangmo, Sonam Namgyal and SonamTobgay. They developed a web based application for managing the records of students in college. Student Management System provides information about departments, programs, courses and staff information. It will facilitate the college administration to manage student records easily and accurately. (Sonam Namgyal; Sonam Tobgay; Dechen Wangmo, 2015)  “Student Information System” by Pema Namgang, Ngawang Tenzin, Jigme Singye and Tshering Deker. Student Information System provides a simple web-based interface for managing the records of students in the college. The Student Information System handles many student related information such as semester registration, managing and updating their information, course subscription, fees payment and viewing individual remarks. This Student Management System not only focuses on the students aspects but also it helps the college management deal with these student related information efficiently and without errors. This project will aid the college in maintaining error free efficient student information. It will not only save time but also reduce huge paper work. It will help enhance college administration. The system is developed using a new and popular PHP frame work called Laravel. (Pema Namgang; Jigme Singye; Tshering Deker; Ngawang Tenzin, 2016)  “Development of Student Information System” by N.M.Z. Hashim and S.N.K.S. Mohamed have developed a system which focused on recording and updating the student data. The lecturers can check the student status and give remarks. They used RAD methodology to develop the system. The system was built to replace the manual work of arranging student information. (N.M.Z. Hashim; S.N.KS. Mohammed, 2013)  “Student Information System” by Poshan Raj Basnet. The report address the need for a computer based information system for Everest College. SIS was meant as a medium for the college to properly manage the students’ information. (Basnet, 2007)  “Web Based Student Information Management System” by S.R. Bharamagondar, Geeta R.B and S.G. Totad.Student Information Management System (SIMS) provides a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. The creation and management of accurate, up-to-date information regarding a students’ academic career is critically important in the university as well as colleges. Student information system deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details, placement details and other resource related details too. It tracks all the details of a student from the day one to the end of the course which can be used for all reporting purpose, tracking of attendance, progress in the course, completed semesters, years, coming semester year curriculum details, exam details, project or any other assignment details, final exam result and all these will be available through a secure, online interface embedded in the college’s website. It will also have faculty details, batch execution details, students’ details in all aspects, the various academic notifications to the staff and students updated by the college administration. It also facilitate us explore all the activities happening in the college, Different reports and Queries can be generated based on vast options related to students, batch, course, faculty, exams, semesters, certification and even for the entire college. |
| --- |

| 1. **Challenges:**   *(Please describe the challenges, specific to this research topic, currently being faced internationally.)* |
| --- |
| Server Limitation   * Hosting the server globally * Avoiding attackers   Debugging   * Poorly documented codes by previous group   Requirement Gathering   * Large amount of data to be gathered by only 3 members |
| 1. **Motivation and Need:**   *(Please describe the motivation and need for this work.)* |
| The previous versions were not bug free and had few shortcomings. A better, enhanced version could be developed.  There was an urgent need for an automated registration system in college to eliminate the cumbersome manual registration procedure. A portal for parents to monitor their children’s progress and a dedicated platform for maintaining result record for students and parent had to be developed. |

# 3. Aim and Objectives of the Project

| *(Please write the actual aim of your project. Also, describe the measurable objectives of the project and define the expected results. Use results-oriented wording with verbs such as ‘to develop..’, ‘to implement..’, ‘to research..’, ‘to determine..‘, ‘to identify..’ The objectives should not be statements and should not include explanations and benefits. The objective should actually specify in simple words what the project team intends to achieve (something concrete and measurable/ deliverable). Fill only those objectives that are applicable to the proposed project.)* |
| --- |
| AIM : To modify and enhance Student Information System  OBJECTIVES :   * + 1. Review the current System * The previous system developed had functional shortages. It will be reviewed and reworked to map the need of college.   + 1. Fix the bugs in the current system * The bugs identified during the review will be studied and fixed. Major shortcomings of features will be identified to be developed in the later stage.   + 1. Enable bulk upload of validated data * In the current system, administrator need to validate data for each student. This procedure will be improved and bulk upload will be incorporated. Students and staffs can then update their details.      * + 1. Parent portal * As of now, a parent have to register to view the details about students. More over parents can view information of all students. Such system violates student’s privacy rights. In order to address this issue, the parent portal will be removed and instead CID and DoB will be assigned to view their student’s details.   + 1. Develop Result feature * There is no dedicated platform for tutors to upload the students mark, instead they forward the marks to the Exam Cell and the exam cell generate results. The new result feature will enable tutors to directly upload the marks to the result portal and students will be alerted immediately. The results of all the semesters will be added to every student’s bio data so the results of any semester can be viewed later on. |
|  |
|  |

# 4. Methodology

| 1. **Development / Research / Test Methodology:**   *(Please describe the technical details and justification of your development and research plan and test plan and testing strategies. Identify specialized equipment, facilities and infrastructure which are required for the project and their utilization plan. The block diagrams, system flow charts, high level algorithm details etc. have to be provided in this section. Also, describe the overall methodology to be used for the particular research topic)*  Methodology : Agile Scrum  Agile methodology is a collection of innovative, user-centered approaches to system development. It tries to define an overall system plan quickly, develop and release software quickly, and then continuously revise the software to add additional features. It isn’t a set of tools or a single methodology, but a philosophy of people who had realized that in software development it’s pretty hard to predict:   * + 1. The number of changes and priority changes in software requirements     2. How much design is needed before construction is used to prove it.     3. The time for analysis, design, construction and testing   Agile development methodology is a conceptual framework for undertaking any software engineering project.  Scrum is a subset of Agile. It is a lightweight process framework for agile development, and the most widely-used one. Scrum is most often used to manage complex software and product development, using iterative and incremental practices. Scrum significantly increases productivity and reduces time to benefits relative to classic “waterfall” processes. Scrum processes enable organizations to adjust smoothly to rapidly-changing requirements, and produce a product that meets evolving business goals.  In Scrum, projects are divided into succinct work cadences, known as sprints, which are typically one to three weeks in duration. At the end of each sprint, stakeholders and team members meet to assess the project’s progress and plan its next steps. This allows project’s direction to be adjusted or reoriented based on the work completed, not speculation or predictions. Philosophically, the emphasis on an ongoing assessment of completed work is largely responsible for its popularity with managers and developers alike. But what allows the Scrum methodology to really work is a set of roles, responsibilities, and meetings that never change.  An agile Scrum process benefits the organization by helping it to:  Increase the quality of the deliverables  Cope better with change (and expect the changes)  Provide better estimates while spending less time creating them  Be more in control of the project schedule and state |
| --- |
| *Figure 1. Scrum method overview*  Implementing agile scrum  Roles  A scrum team has a slightly different composition than a traditional waterfall project, with three specific roles: product owner, scrum master, and the development team.    One of the team member will be assigned as the product owner who will be responsible for staying in touch with the stakeholders and identify the right priorities and communicate them to the team. The team leader will be the scrum master who will facilitate the complete process. All of the team together will constitute the development team who will collaborate together to figure out what to do in order to fulfill the requirements.  Process  The product owner will keep in touch with the customer, keep talking to the customer to gather requirements and communicate it to the team. The team will then collaborate to figure out what needs to be done in order to achieve the requirements.  Sprint planning  In sprint planning, all the objectives will be listed in a product backlog. A backlog can be anything from a sticky note to a big poster. The objectives will be prioritized and then presented to the team and the team will study the objectives and decide how much of the task will be completed in one agile sprint. A sprint can span over a fortnight to a month at maximum. Team will then plan discuss what all need to be done in order to complete the sprint and list it in the sprint backlog. Sprint backlog will serve as a guide only for a specific sprint.  Daily Scrum  In order to keep check of the progress the team meet every day at the same place at the same time to discuss what has been done over the past 24 hours. It allows the scrum leader to monitor the progress and give timely feedback.  The sprints will be incremented until all the objectives has been incorporated.    Every sprint will follow the typical agile methodology. Each objective from the backlog will undergo the agile process involving the discovery phase, planning phase, design phase, implementing and testing phase. The output of the agile method will then be evaluated and deployed.  E:\agileee.png |

| 1. **Project Team:** | |
| --- | --- |
| ***Title / Position*** | ***Number*** |
| Project Internal Guide | 1 |
| Project External Guide | 0 |
| Student Team Members | 3 |
| Others (please specify) | - |
| Add more rows if required |  |

| 1. **Project Activities:**   *(Please list and describe the main project activities, including those associated with the transfer of the research results to customers/beneficiaries. The timing and duration of research activities are to be shown in the Gantt chart in Section 8.)*   * + 1. Gathering tools and data. * Install and Configure Laravel Framework. Get files and data of the previous system from ICT.   + 1. Review previous system * Review the previous system and identify the bugs   + 1. Fix the bugs * Fix the bugs identified during review   + 1. Modify parent portal * Enhance the parent portal so that the parents can view only their children’s details.   + 1. Develop Bulk upload |
| --- |
| * Develop bulk upload so that the administrator can upload all the students all at once.   + 1. Requirement gathering to develop Result feature * Gather required information about result system. Consult exam cell and Dean Academic Affairs.   + 1. Design Result feature * Design the layout and workout the process for result feature   + 1. Coding * Implement the Design of the result feature   + 1. Review the result feature * Test and validate the feature   + 1. Modification of result feature * Address any issues in exam feature identified during review   + 1. Server Set up * Prepare the server for hosting SIS   + 1. Hosting Server * Make the SIS live!   + 1. Server Review * Check the performance of SIS while live * Collect feedback and implement   + 1. Documentation * Prepare the Project Documentation |

| 1. **Key Milestones and Deliverables:**   *(Please list and describe the principal milestones and associated deliverables of the project. A key milestone is reached when a significant phase in the project is concluded, e.g. selection and simulation of algorithms, completion of architectural design and design documents, commissioning of equipment, completion of test, etc.) The timing of milestones is also to be shown in the Gantt chart in Section 8.* | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| The information given in this table will be the basis of project monitoring and marks assignment to the project group. | | | | | | | |
| *No.* | | *Elapsed time from start (in months) of the project* | | *Milestone* | | *Deliverables* | |
|  | *-* | | *Commencement of the project* | |  | |
|  | 1 month | | Reviewed the previous system and identified minor bugs | | Bug free system | |
|  | 2 month | | Modify parent portal | | Functional parent portal | |
|  | 3 month | | Develop bulk upload | | Bulk upload available | |
|  | 5 month | | Start gathering requirement for Exam and result feature | | SRS | |
|  | 5.5 month | | Start design | | Design prototype | |
|  | 7 month | | Coding and Implementation | |  | |
|  | 7.5 month | | Review and Modify | | Functional Result feature | |
|  | 8 month | | Set up server | |  | |
|  | 8.5 month | | Host the site | | SIS is LIVE! | |
|  | 9 month | | Start Documentation | | Documentation ready | |
|  |  | | Complete Documentation | |  | |
|  |  | | Project completed | |  | |
| (Please add more rows if required.) | | | | | | | |

# 5. Benefits of the Project (Expected output/outcomes):

|  |
| --- |
| The outcome of this project would be a fully functional Student Information System with the following features:   * + 1. Bug free system     2. Bulk upload and delete     3. Parent portal to monitor student’s progress     4. Dedicated Result module     5. Functional and LIVE system. |
|  |

# 6. Risk Analysis/Feasibility

| 1. **Risks of the Project:**   (Please describe the factors that may cause delays in, or prevent implementation of, the project as proposed above; estimate the degree of risk.)   | (Please mark 🗹 where applicable) | Low | Medium | High | | --- | --- | --- | --- | | * Technical risk |  | 🗹 |  | | * Timing risk |  | 🗹 |  | | * Budget risk | 🗹 |  |  | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A1. Comments:** |
| Technical Risk:   * Upgrade compatibility (Previous system build on Laravel 4.2 while current system will be built on 5.2) * Server security (The past system got attacked while hosting global and same can happen to the current system too)   Timing Risk:   * Difficult to manage time between study hours and project development. * Failure to meet the proposed schedule |
|  |

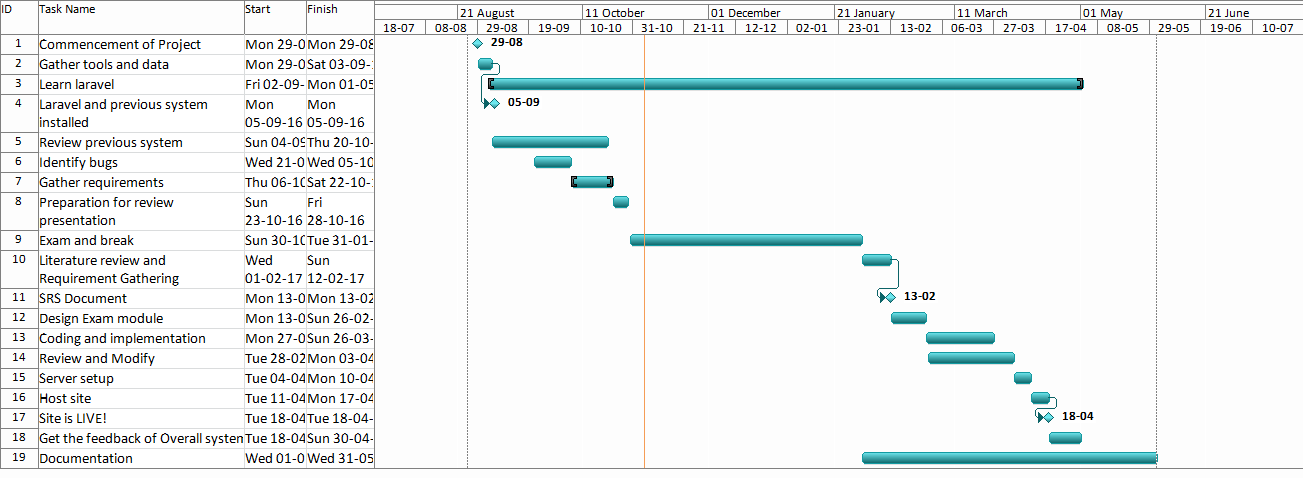
# 7. Project Approval Certificate

| *(Approval of Project Proposal by the Competent Authority (Department Chairman) and Project Review Team is mandatory before the start of project execution****.****)*  ***Project Review Team:***   | Sl # | Name | Signature | | --- | --- | --- | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  |   (Please add more rows if required.)  ***Project Coordinator***   | Name: |  | | | | --- | --- | --- | --- | | Designation: |  | | | | Email: |  | | | | Date: |  |  | Signature: |   ***Competent Authority – Head of Department***   | Name: |  | | | | --- | --- | --- | --- | | Designation: |  | | | | Email: |  | | | | Date: |  |  | Signature  & stamp: | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

# 8. Reviewers Panel Comments

# 10. Project Schedule / Milestone Chart /Work plan

*(Project schedule using MS-Project (or similar tools) with all tasks, deliverables, milestones, clearly indicated are preferred. Task should be measured in terms of hours)*



# 13. Report Writing Guidelines

*(Project report will be written under the specified guidelines.)*

# Bibliography

Ajay Shankhar Bidyarthy;Abhishek Kumar. (2012). *Student Database Management System.*

Armel, J. (2014). *Web application development with Laravel PHP Framework version 4.* Helsinki.

Basnet, P. R. (2007). *Student Information Management System.*

Joshi, L. M. (2015, july). A Research Paper on College Management System. *International Journal of Computer Applications, 122*(11), 32-64.

N.M.Z. Hashim; S.N.KS. Mohammed. (2013, August). Development of Information System. *International Journal of Science and Research, 2*(8).

Pema Namgang; Jigme Singye; Tshering Deker; Ngawang Tenzin. (2016). *Student Information System.* Chhukha.

S.R. Bharamagondar; Geeta R.B; S.G. Totad. (2013). Web based Student Information Management System. *Interantional Journal of Advanced Research in Computer and Communication Engineering, 2*(6).

Saurab Kumar Jain; Umal Joshi; Bhapesh Kumar Sharma. (2010). *Attendance Management System.* Jaipur.

Sonam Namgyal; Sonam Tobgay; Dechen Wangmo. (2015). *Student Management System.* Chhukha.